Title (en)

Method of making optical devices.

Title (de)

Herstellungsmethode von optischen Elementen.

Title (fr)

Méthode et fabrication des éléments optiques.

Publication

EP 0407034 A2 19910109 (EN)

Application

EP 90306147 A 19900606

Priority

US 36665889 A 19890615

Abstract (en)

A fiber optic coupler (50) is formed by providing a glass tube (10) having a longitudinal aperture (12) extending therethrough. Glass optical fibers (19,20), each having a core, cladding and coating (21,22) are disposed within the longitudinal aperture, the fibers extending beyond each end thereof. The coating is removed from that portion of the fibers in the midregion of the tube. The midregion of the tube is heated, collapsed about the fibers, and drawn to reduce the diameter thereof over a predetermined length (51). The fibers that are used in the process of making the coupler are initially provided with a coating that is too thin to provide good handleability and strength. However, the thin initial coating enables the use of a tube having a small aperture and thereby enhances the tube collapse step. After the coupler is formed, the fibers extending there from are overcoated. The process can be used to make other kinds of optical devices including integrated optical components.

IPC 1-7

C03B 37/00; C03C 25/00; G02B 6/28

IPC 8 full level

C03C 25/00 (2006.01); **G02B 6/28** (2006.01)

CPC (source: EP KR US)

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